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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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10/578,547

05/05/2006

Ashish Sen

63146A

9470

109 7590 11/23/2009

The Dow Chemical Company  
Intellectual Property Section  
P.O. Box 1967  
Midland, MI 48641-1967

EXAMINER

THROWER, LARRY W

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

11/23/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |                                   |  |
|------------------------------|--------------------------------------|-----------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/578,547 | <b>Applicant(s)</b><br>SEN ET AL. |  |
|                              | <b>Examiner</b><br>LARRY THROWER     | <b>Art Unit</b><br>1791           |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 July 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) 10-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Response to Amendment*

1. The amendment filed July 13, 2009 has been entered. Claim 1 is amended; claim 9 is canceled; claims 10-17 are withdrawn. Claims 1-8 are under examination.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1-4** are rejected under 35 U.S.C. 102(b) as being anticipated by Balchan (US 3,605,818).
- Regarding **claims 1-4**, Balchan discloses a process for winding a melt spun monofilament elastic fiber (col. 4, lines 41-72) onto a core (30) for forming a package (page 2, lines 3-8; figs. 1-3; col. 4, lines 46-49; col. 7, lines 14-36; claim 5). The process includes forming the elastic fiber into a shape having a fiber cross section such that the width of the fiber is at least 5 times the thickness of the fiber, prior to winding onto the core (col. 7, lines 14-36).

4. **Claims 1-3 and 7-8** are rejected under 35 U.S.C. 102(e) as being anticipated by Koyanagi *et al.* (US 2003/0108740).
- Regarding **claims 1-3**, Koyanagi *et al.* discloses a process for winding a melt spun monofilament (§110) elastic fiber onto a core for forming a package (§115). The process includes forming the elastic fiber into a shape having a fiber cross section such that the width of the fiber is at least 5 times the thickness of the fiber, prior to winding onto the core (§94).
  - Regarding **claims 7-8**, Koyanagi *et al.* discloses the fiber being formed using dies having an opening which has two generally perpendicular axes, wherein one axis is at least about 3 times longer than the other axis (§§ 94 and 115).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
6. **Claims 5-6** are rejected under 35 U.S.C. 103(a) as being unpatentable over Balchan (US 3,605,818), as applied to claim 1 above, in view of Patel *et al.* (US 2005/0165193).
- Balchan is silent as to the fiber being a linear ethylene-alpha olefin interpolymers which has been substantially crosslinked. However, Patel *et al.* discloses a process

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for winding an elastic fiber onto a core (fig. 3), the elastic fiber being an olefin polymer (abstract), a linear ethylene-alpha olefin interpolymers (¶8), or a substantially linear ethylene-alpha olefin interpolymers which has been substantially crosslinked (¶91). Patel *et al.* teaches that these materials exhibit good resistance to ozone, chlorine and high temperature (¶8). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected olefin polymers of Patel *et al.* for use in the method of Balchan in order to effectively resist ozone, chlorine and high temperatures, as taught by Patel *et al.*

### ***Response to Arguments***

7. Applicant's arguments filed July 13, 2009 have been fully considered but they are not persuasive.
- Applicant first argues that the fibers of Balchan "are desired to have an elongated cross section to improve their strength and coverage as reinforcing ribbon. Neither optics nor reinforcing strength are applicable for melt spun monofilament elastic fibers as recited in the current claims." This argument has been considered but is not persuasive. Balchan discloses a process for winding a melt spun monofilament elastic fiber (col. 4, lines 41-72) onto a core (30) for forming a package (page 2, lines 3-8; figs. 1-3; col. 4, lines 46-49; col. 7, lines 14-36; claim 5). The strength, coverage or optical properties that Applicant argues are found in Balchan are neither excluded from, nor included, in the instant claims.

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- Applicant further argues that Koyanagi et al. relates to fibers formed from polyesters and therefore are not elastic. This argument has been considered but is not persuasive. Koyanagi et al. discloses the fibers to be "excellent in elastic recovery." (¶12).
- Applicant finally argues that it is "unclear from paragraph 94 (cited by the Examiner) why one would make the fiber of Koyanagi elongated." And further that "there is no teaching that such modification is beneficial to stable winding to prevent sloughing problem which will further result in breaks during use due to tangling." This argument has been considered but is not persuasive. Koyanagi discloses the fiber being elongated, which is no less than is required by the claims. The reason for the elongation is irrelevant to anticipation. Further, there is no requirement in the claims that the fibers wind stably, prevent sloughing, or reduce breaks.

### ***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LARRY THROWER whose telephone number is 571-270-5517. The examiner can normally be reached on Monday through Friday from 9:30AM-6PM est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina A. Johnson can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Larry Thrower/  
Examiner, Art Unit 1791

/Christina Johnson/  
Supervisory Patent Examiner, Art Unit 1791